

US EPA RECORDS CENTER REGION 5



417999

**SUBSURFACE INVESTIGATION  
CQC, INC. - 3507 COOPER DRIVE  
ELKHART, INDIANA  
PROJECT NO. 08SB0183**

**PREPARED FOR:**

**FRED LANDS  
ELKHART, INDIANA**

**PREPARED BY:**

**ALT & WITZIG ENGINEERING, INC.  
ENVIRONMENTAL DIVISION**

**JANUARY 28, 2009**



**Alt & Witzig Engineering, Inc.**

3725 Foundation Court, Suite A • South Bend, IN 46628  
(574) 289-8378 • FAX (574) 289-0282

January 28, 2009

Fred Lands  
3351 Greenleaf Boulevard  
Elkhart, Indiana 46514  
ATTN: Mr. Fred Lands

RE: Subsurface Investigation  
3507 Cooper Drive  
Elkhart, Indiana 46514  
Alt & Witzig Project No. 08SB0183

Dear Mr. Lands:

In compliance with your request, we have completed a Subsurface Investigation at the above referenced property (Site). This investigation was performed in general accordance with the accepted standards for environmental subsurface investigation at the time it was conducted.

The purpose of this investigation was to collect data to identify the source of contamination detected at the Site during the Geocel investigation conducted by the Indiana Department of Environmental Management (IDEM).

Sincerely,

ALT & WITZIG ENGINEERING, INC.

Stephen Shank, LPG  
Senior Project Geologist

James R. Bennett  
Project Manager

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## **1.0 INTRODUCTION**

This report presents the results of a limited subsurface investigation performed at 3507 Cooper Drive, Elkhart, Indiana (Site). Prior to being annexed into the City of Elkhart the Site had an address of 23542 Cooper Drive. The purpose of this investigation was to collect data to identify the source of contamination detected at the Site during the Geocel investigation conducted by the Indiana Department of Environmental Management (IDEM).

The scope of work completed during this investigation included the collection of three surface soil samples and the installation of three temporary groundwater monitoring wells. One soil sample was collected at each surface boring location and one groundwater sample was collected from each temporary monitoring well and submitted to a laboratory for chemical analysis of chlorinated solvents.

This investigation was performed for Fred Lands. Authorization to perform this assessment was in the form of a written agreement between Mr. Fred Lands and Alt & Witzig Engineering, Inc.

## **2.0 SUBSURFACE INVESTIGATION**

### **2.1 SCOPE OF WORK**

On December 11, 2008, an Alt & Witzig Senior Project Manager and a Geo-Probe operator performed the field activities associated with the subsurface investigation. A total of three surface soil borings were performed with the use of a hand auger to maximum depths of 12 inches below the surface (bgs). Three temporary groundwater monitoring wells were installed to maximum depths of 30 feet (bgs). The locations and purpose of these borings are as follows:

- Hand auger borings HA-1 through HA-3 were placed at the bottom of the drainage ditch that runs in an east/west direction immediately south of the Geocel facility and the project Site. The location of these borings are depicted on the Hand Auger Boring Location Aerial in Appendix A. The borings were extended to approximately 12 inches bgs. Soils collected from the hand auger borings were screened in the field with the use of a photoionization detector (PID) for volatile organic vapors (VOVs). One soil sample was collected at each location with the use of a terra core kit and submitted to a laboratory for chemical analysis.

The purpose of these borings was to determine if surface run off from the parking and drum storage area south of the Geocel facility had impacted the soils in the drainage ditch.

- Borings B-1 through B-3 were placed on the north side of the project Site. The location of these borings are depicted on the Boring Location Aerial in Appendix A. Soil samples were not collected from these locations. Groundwater samples were collected at B-1 at 8 feet, 18 feet, and 30 feet bgs and B-2 and B-3 at a depth of 18 feet bgs.

The purpose of these boring/temporary monitoring wells was to determine if a source for the contamination detected at the Site during the IDEM investigation originated from a source on the north side of Cooper Drive.

### **2.2 DRILLING PROCEDURE**

**2.2.1 Hand Auger** Surface soil samples HA-1 through HA-3 were collected with the use of a 3 inch in diameter hand driven bucket auger. The auger was hand turned into the surface soils to a maximum depth of 12 inches (bgs). Soils were screened in the field with a PID. One soil sample was selected for laboratory analysis and collected with the use of a terra core kit. Sample jars designated for headspace analysis were placed in zip lock bags. Surface soils consisted of organic soils underlain by moist dark yellowish brown (10 YR 4/6) medium sand with trace gravel.

**2.2.2 Temporary Monitoring Wells** Three temporary groundwater monitoring wells (B-1, B-2, & B-3) were completed with the use of a Geo-Probe. The Geo-Probe was used to advance a dual tube sampler into the subsurface. At B-1 the dual tube was advanced to 8 feet bgs and the groundwater sample collected, the dual tube was then removed, decontaminated and advanced adjacent to the initial boring to a depth of 18 feet. The procedure was repeated for the sample collected at 30 feet bgs. For B-2 and B-3 the dual tube was advanced to a depth 18 feet bgs and the sample collected. Soil samples were not collected for field screening or inspection due to heaving sands at eight feet bgs.

Groundwater samples were collected with the use of a peristaltic pump and placed into laboratory supplied 40 milliliter VOAs. No soil samples were collected for analysis from B-1 through B-3.

### **2.3 HEADSPACE ANALYSIS**

Field headspace soil samples were screened for the presence of organic vapors using a PID. The PID measures the concentration of organic vapors in the headspace in parts per million (ppm). The values are affected by temperature, soil type, soil conditions, amount of sample, and volatility of the organic substance. Accordingly, the readings reported from the PID are in units relative to the calibration gas, rather than exact concentrations. The PID was calibrated to an isobutylene standard immediately prior to and following the headspace analysis.

The soil samples were allowed to equilibrate at the ambient temperature for a minimum of ten minutes prior to screening. Each individual sample was agitated for approximately ten seconds to break soil clods and release vapors. The zip lock bag was opened and the PID probe tip inserted into a small aperture in the bag. The highest instrument reading was immediately recorded. Unusual meter behavior was also noted if experienced (i.e. meter quenching, span setting exceeded by contaminant concentration). Headspace analysis results for soil samples collected at the Site did not indicate the presence of Volatile Organic Vapors (VOVs).

### **2.4 QUALITY CONTROL/QUALITY ASSURANCE (QA/QC)**

The soil samples were immediately collected into terra core kits and placed into new 40-milliliter VOAs vials. The samples were then labeled with project name, identification code, and sample location. Samples collected from the Site for the purpose of laboratory analysis were immediately placed in an iced cooler until submitted to the laboratory.

Groundwater samples were collected with the use of a peristaltic pump through flexible one quarter inch tubing. Groundwater was collected directly into laboratory supplied sampling containers. Volatile sample containers were checked for entrapped air prior to placing the sample in an iced cooler.

Decontamination of all sampling equipment was performed to prevent cross-contamination.

Decontamination was accomplished using a detergent and water wash followed by a distilled water rinse. The washing included vigorous scrubbing with a stiff bristle brush to remove all soil particles and loosen films or other debris. The dual tube sampling device was decontaminated between each boring and between each sampling depth.

A chain of custody form was completed for the samples. A chain of custody provides a record of each individual that contacts the samples from the point of origin through analysis and is an elementary portion of a quality control protocol. Laboratory analysis was performed by Microbac Laboratories located in Merrillville, Indiana. Copies of the original laboratory certificate of analysis and chain of custody are presented in Appendix B.

### 3.0 SOIL & GROUNDWATER LABORATORY ANALYSIS

#### 3.1 SOIL & GROUNDWATER SAMPLING & ANALYSIS

Soil samples were collected at a depth of approximately 12 inches (bgs). Groundwater was encountered at the Site at a depth of approximately six feet (bgs). Groundwater samples were collected at depths of 8, 18, and 30 feet (bsg) at B-1 and at 18 feet (bgs) at B-2, and B-3.

Table 1 Soil Sample Results for Chlorinated Solvents										
Location	Depth	1,1-Dichloro ethane	1,1-Dichloro ethene	Cis-1,2- Dichloro ethylene	Trans-1,2- Dichloro ethylene	Methylene Chloride	Tetra Chloro ethene	1,1,1- Trichloro ethane	Trichloro ethene	Vinyl Chloride
HA-1	12"	< 0.0062	< 0.0062	< 0.0062	< 0.0062	< 0.025	< 0.0062	< 0.0062	< 0.0062	< 0.012
HA-2	12"	< 0.0062	< 0.0062	< 0.0062	< 0.0062	< 0.025	< 0.0062	< 0.0062	< 0.0062	< 0.012
HA-3	12"	< 0.0062	< 0.0062	< 0.0062	< 0.0062	< 0.025	< 0.0062	< 0.0062	< 0.0062	< 0.012
RISC RDCL		5.6	0.058	0.4	0.68	0.023	0.058	1.9	0.057	0.013
RISC IDCL		58	42	5.8	14	1.8	0.64	280	0.082	0.027
Sample Date – December 11, 2008										
< # – Non Detect at or above laboratory detection limits.										
Results reported in parts per million (ppm) or milligrams/ kilogram (mg/k)										

Table 2 Groundwater Sample Results for Chlorinated Solvents										
Location	Depth	1,1-Dichloro ethane	1,1-Dichloro ethene	Cis-1,2- Dichloro ethylene	Trans-1,2- Dichloro ethylene	Methylene Chloride	Tetra Chloro ethene	1,1,1- Trichloro ethane	Trichloro ethene	Vinyl Chloride
B-1	8'	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	< 5.0	< 5.0	< 10.0
B-1	18'	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	< 5.0	< 5.0	< 10.0
B-1	30'	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	< 5.0	< 5.0	< 10.0
B-2	18'	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	< 5.0	< 5.0	< 10.0
B-3	18'	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	< 5.0	< 5.0	< 10.0
RISC RDCL		990	7.0	70	100	5.0	5.0	200	5.0	2.0
RISC IDCL		10,000	5,100	1,000	2,000	380	55	29,000	7.2	4.0
Sample Date – December 11, 2008										
< # - Non Detect at or above laboratory detection limits.										
Results reported in parts per billion (ppb) or micrograms/liter (ug/L)										

Chlorinated solvents were not detected in the soil or groundwater samples collected at the Site. Copies of the original laboratory results can be found in Appendix B.



On November 24, 2008, Cripe's Septic Services, Inc. under contract with Fred Lands collected a water sample from the septic tank located on the north side of the Site. The water sample was submitted to Sherry Laboratories, South Bend, Indiana for volatile organic compounds (VOC) analysis. The analytical results did not indicate the presence of VOCs at or above laboratory detection limits. A copy of the original laboratory results are included in Appendix B.

#### 4.0 CONCLUSIONS

This report presents the results of a limited subsurface investigation performed at CQC, Inc. located at 3507 Cooper Drive, Elkhart, Indiana (Site). The purpose of this investigation was to collect data to identify the source of contamination detected at the Site during the Geocel Investigation conducted by IDEM.

The scope of work completed during this investigation included the collection of three surface soil samples from hand auger borings and the collection of groundwater samples from three temporary wells. Soil and groundwater samples were submitted to a laboratory for chemical analysis of chlorinated solvents.

Laboratory analytical results did not indicate the presence of chlorinated solvents in the soil or groundwater samples collected at the Site. Additionally, Cripe's Septic Service collected a water sample from the septic tank and submitted the sample to Sherry Laboratory for VOC analysis. Analytical results did not indicate the presence of VOCs including any chlorinated solvents in the sample.

An attempt was made to collect groundwater elevation data through the Geo Probe dual tube sampling device but was not successful. A groundwater flow map based on data collected by IDEM is included in Appendix C. Based on the geology of the area and the data collected by IDEM the groundwater flow is in a southwesterly direction towards the St. Joseph River.

Although available groundwater quality data and groundwater flow data is not conclusive there is no evidence to suggest that the contamination detected at the Site during the IDEM investigation is from a source north of the Site or from the Site itself. The Site, and in particular the southern portion of the Site, is located southwest of the Geocel facility. Additionally, the shallow IDEM groundwater sample (8 feet) was non-detect with detectable concentrations at both 18 feet and 30 feet bgs. This would suggest that the contamination originated from an off-site source and migrated onto the Site from a distance. Geocel remains the most likely source of the contamination at the Site.

Alt & Witzig on behalf of Fred Lands requests that IDEM issue either a "Comfort Letter" or a scope of work that would satisfy IDEM that the Site is not a potent source so that a Comfort Letter could be obtained and the property made available for sell.

## **APPENDIX A**

**Hand Auger Boring Location Aerial**  
**Temporary Groundwater Monitoring Well Location Aerial**

## N

Map Units: feet

# Geocel

CQC

HA-1

HA-2

HA-3

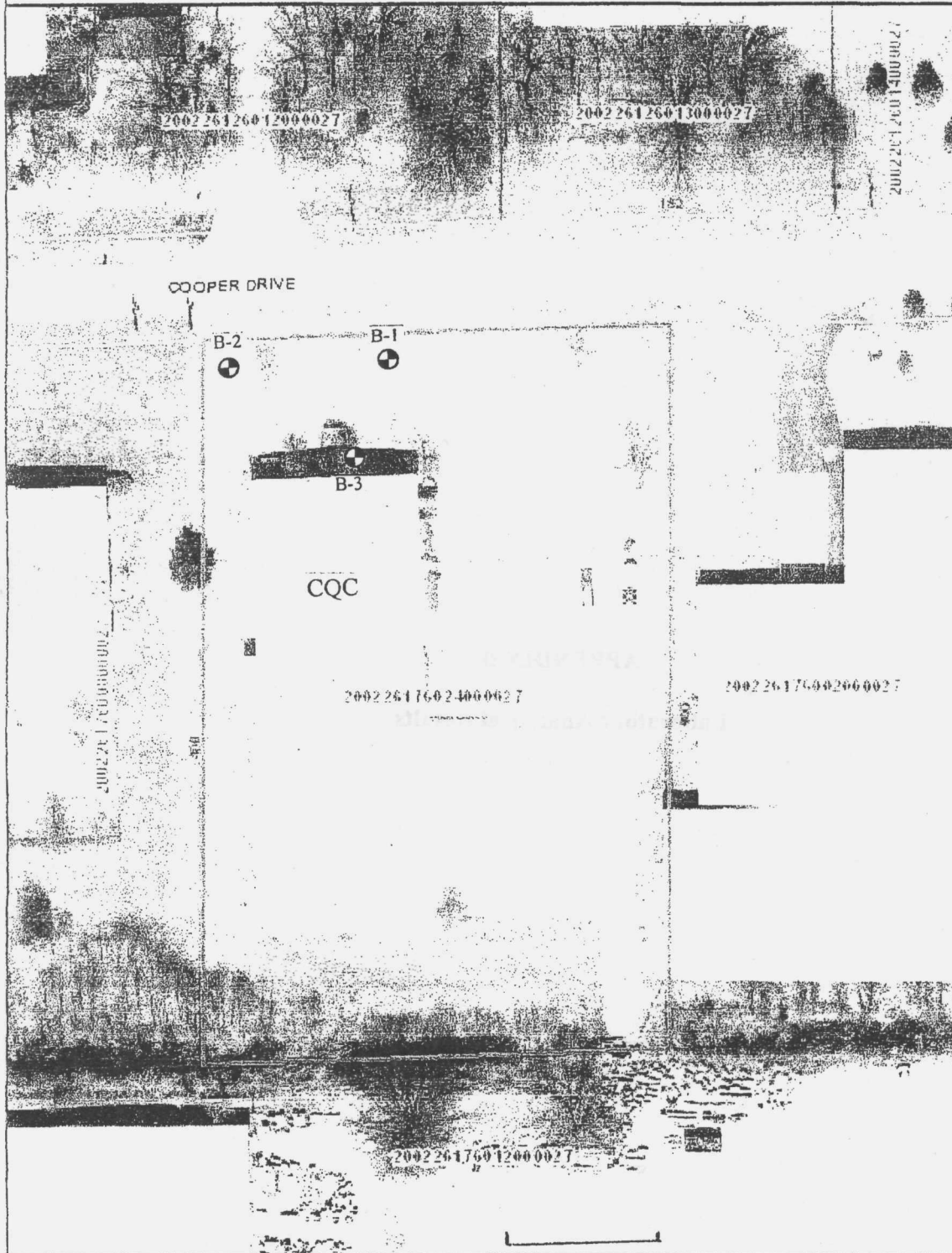
MARINA DRIVE

MARRIAGE DAY R.

Elkhart County, IN

N

0 167  
Map Units: feet



**Soil & Groundwater Investigation  
Results**



December 19, 2008

Jim Bennett  
Alt & Witzig Engineering, Inc.  
3725 Foundation Court, Suite A  
South Bend, IN 46628

Work Order No.: ME0812580

RE: 08SB0183/COOPER DRIVE

Dear Jim Bennett:

Microbac Laboratories, Inc. received 3 samples on 12/12/2008 for the analyses presented in the following report.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,  
Microbac Laboratories, Inc.

A handwritten signature in black ink, appearing to read "Deborah Griffiths", is written over the printed name and title.

Deborah Griffiths  
Senior Project Manager

Enclosures



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**WORK ORDER SAMPLE SUMMARY**

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**Date:** *Friday, December 19, 2008*

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**CLIENT:** Alt & Witzig Engineering, Inc.  
**Project:** 08SB0183/COOPER DRIVE  
**Lab Order:** ME0812580

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Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
ME0812580-01A	HA-1		12/11/2008 8:50:00 AM	12/12/2008
ME0812580-02A	HA-2		12/11/2008 9:05:00 AM	12/12/2008
ME0812580-03A	HA-3		12/11/2008 9:30:00 AM	12/12/2008



**ANALYTICAL RESULTS**

Date: Friday, December 19, 2008

Client: Alt & Witzig Engineering, Inc.  
Client Project: 08SB0183/COOPER DRIVE  
Client Sample ID: HA-1  
Sample Description:  
Sample Matrix: Soil

Work Order / ID: ME0812580-01  
Collection Date: 12/11/08 08:50  
Date Received: 12/12/08 00:00

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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**VOLATILE ORGANICS (5035)**

Method: SW5035/8260B

Prep Date/Time:

Analyst: MLT

1,1-Dichloroethane	A	ND	0.0062		mg/Kg-dry	1	12/18/08 21:22
1,1-Dichloroethene	A	ND	0.0062		mg/Kg-dry	1	12/18/08 21:22
cis-1,2-Dichloroethene	A	ND	0.0062		mg/Kg-dry	1	12/18/08 21:22
trans-1,2-Dichloroethene	A	ND	0.0062		mg/Kg-dry	1	12/18/08 21:22
Methylene chloride	A	ND	0.025		mg/Kg-dry	1	12/18/08 21:22
Tetrachloroethene	A	ND	0.0062		mg/Kg-dry	1	12/18/08 21:22
1,1,1-Trichloroethane	A	ND	0.0062		mg/Kg-dry	1	12/18/08 21:22
Trichloroethene	A	ND	0.0062		mg/Kg-dry	1	12/18/08 21:22
Vinyl chloride	A	ND	0.012		mg/Kg-dry	1	12/18/08 21:22
Total Xylenes	A	ND	0.0062		mg/Kg-dry	1	12/18/08 21:22
Surr: 4-Bromofluorobenzene	S	93.8	40.1-140		%REC	1	12/18/08 21:22
Surr: Dibromofluoromethane	S	102	77.6-126		%REC	1	12/18/08 21:22
Surr: 1,2-Dichloroethane-d4	S	105	76.8-140		%REC	1	12/18/08 21:22
Surr: Toluene-d8	S	97.3	33-194		%REC	1	12/18/08 21:22

**PERCENT MOISTURE**

Method: 2540B\_18ED

Prep Date/Time:

Analyst: SMA

Percent Moisture	A	20	0.10		WT%	1	12/15/08 15:01
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## ANALYTICAL RESULTS

Date: Friday, December 19, 2008

Client: Alt & Witzig Engineering, Inc.  
Client Project: 08SB0183/COOPER DRIVE  
Client Sample ID: HA-2  
Sample Description:  
Sample Matrix: Soil

Work Order / ID: ME0812580-02  
Collection Date: 12/11/08 09:05  
Date Received: 12/12/08 00:00

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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### VOLATILE ORGANICS (5035)

Method: SW5035/8260B

Prep Date/Time:

Analyst: MLT

1,1-Dichloroethane	A	ND	0.0064		mg/Kg-dry	1	12/18/08 16:21
1,1-Dichloroethene	A	ND	0.0064		mg/Kg-dry	1	12/18/08 16:21
cis-1,2-Dichloroethene	A	ND	0.0064		mg/Kg-dry	1	12/18/08 16:21
trans-1,2-Dichloroethene	A	ND	0.0064		mg/Kg-dry	1	12/18/08 16:21
Methylene chloride	A	ND	0.025		mg/Kg-dry	1	12/18/08 16:21
Tetrachloroethene	A	ND	0.0064		mg/Kg-dry	1	12/18/08 16:21
1,1,1-Trichloroethane	A	ND	0.0064		mg/Kg-dry	1	12/18/08 16:21
Trichloroethene	A	ND	0.0064		mg/Kg-dry	1	12/18/08 16:21
Vinyl chloride	A	ND	0.013		mg/Kg-dry	1	12/18/08 16:21
Total Xylenes	A	ND	0.0064		mg/Kg-dry	1	12/18/08 16:21
Surr: 4-Bromofluorobenzene	S	84.8	40.1-140		%REC	1	12/18/08 16:21
Surr: Dibromofluoromethane	S	92.9	77.6-126		%REC	1	12/18/08 16:21
Surr: 1,2-Dichloroethane-d4	S	78.0	76.8-140		%REC	1	12/18/08 16:21
Surr: Toluene-d8	S	110	33-194		%REC	1	12/18/08 16:21

### PERCENT MOISTURE

Method: 2540B\_18ED

Prep Date/Time:

Analyst: SMA

Percent Moisture	A	19	0.10		WT%	1	12/15/08 15:01
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# Microbac

## ANALYTICAL RESULTS

Date: Friday, December 19, 2008

Client: Alt & Witzig Engineering, Inc.  
 Client Project: 08SB0183/COOPER DRIVE  
 Client Sample ID: HA-3  
 Sample Description:  
 Sample Matrix: Soil

Work Order / ID: ME0812580-03  
 Collection Date: 12/11/08 09:30  
 Date Received: 12/12/08 00:00

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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### VOLATILE ORGANICS (5035)

Method: SW5035/8260B

Prep Date/Time:

Analyst: MLT

1,1-Dichloroethane	A	ND	0.0052		mg/Kg-dry	1	12/18/08 16:55
1,1-Dichloroethene	A	ND	0.0052		mg/Kg-dry	1	12/18/08 16:55
cis-1,2-Dichloroethene	A	ND	0.0052		mg/Kg-dry	1	12/18/08 16:55
trans-1,2-Dichloroethene	A	ND	0.0052		mg/Kg-dry	1	12/18/08 16:55
Methylene chloride	A	ND	0.021		mg/Kg-dry	1	12/18/08 16:55
Tetrachloroethene	A	ND	0.0052		mg/Kg-dry	1	12/18/08 16:55
1,1,1-Trichloroethane	A	ND	0.0052		mg/Kg-dry	1	12/18/08 16:55
Trichloroethene	A	ND	0.0052		mg/Kg-dry	1	12/18/08 16:55
Vinyl chloride	A	ND	0.010		mg/Kg-dry	1	12/18/08 16:55
Total Xylenes	A	ND	0.0052		mg/Kg-dry	1	12/18/08 16:55
Surr: 4-Bromofluorobenzene	S	96.5	40.1-140		%REC	1	12/18/08 16:55
Surr: Dibromofluoromethane	S	101	77.6-126		%REC	1	12/18/08 16:55
Surr: 1,2-Dichloroethane-d4	S	108	76.8-140		%REC	1	12/18/08 16:55
Surr: Toluene-d8	S	96.9	33-194		%REC	1	12/18/08 16:55

### PERCENT MOISTURE

Method: 2540B\_18ED

Prep Date/Time:

Analyst: SMA

Percent Moisture	A	12	0.10		WT%	1	12/15/08 15:01
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# Microbac®

## FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

NA	=	Not Analyzed	N/A	=	Not Applicable		
mg/L	=	Milligrams per Liter (ppm)	ug/L	=	Micrograms per Liter (ppb)	cfu	= Colony Forming Unit
mg/Kg	=	Milligrams per Kilogram (ppm)	ug/Kg	=	Micrograms per Kilogram (ppb)	ng/L	= Nanograms per Liter (ppt)
U	=	Undetected					
J	=	Analyte concentration detected between RL and MDL (Metals / Organics)					
B	=	Detected in the associated Method Blank at a concentration above the routine PQL/RL					
b	=	Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL					
D	=	Surrogate recoveries are not calculated due to sample dilution					
ND	=	Not Detected at the Reporting Limit (or the Method Detection Limit, if listed)					
E	=	Value above quantitation range					
H	=	Analyte was prepared and/or analyzed outside of the analytical method holding time					
I	=	Matrix Interference					
R	=	RPD outside accepted recovery limits					
S	=	Spike recovery outside recovery limits					
Surr	=	Surrogate					
DF	=	Dilution Factor	RL	=	Reporting Limit	ST	= Sample Type
						MDL	= Method Detection Limit

## SAMPLE TYPES

A	=	Analyte
I	=	Internal Standard
S	=	Surrogate
T	=	Tentatively Identified Compound (TIC, concentration estimated)

## QC SAMPLE IDENTIFICATIONS

MBLK	=	Method Blank	ICSA	=	Interference Check Standard "A"	OPR	=	Ongoing Precision and Recovery Standard
DUP	=	Method Duplicate	ICSAB	=	Interference Check Standard "AB"			
LCS	=	Laboratory Control Sample	LCSD	=	Laboratory Control Sample Duplicate			
MS	=	Matrix Spike	MSD	=	Matrix Spike Duplicate			
ICB	=	Initial Calibration Blank	CCB	=	Continuing Calibration Blank			
ICV	=	Initial Calibration Verification	CCV	=	Continuing Calibration Verification			
PDS	=	Post Digestion Spike	SD	=	Serial Dilution			

## CERTIFICATIONS

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #175458)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-02)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-08)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #0061)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

## MICROBAC LOCATIONS, SERVICE CENTERS (SC) AND SATELLITE OFFICES (Sat)

Baltimore Division - Baltimore, MD	Kentucky Division - Louisville, KY	New Castle Division - New Castle, PA
Camp Hill Division - Camp Hill, PA	Kentucky Division (Sat) - Evansville, IN	Pittsburgh Division - Warrendale, PA
Camp Hill Division (SC) - Pittston, PA	Kentucky Division (Sat) - Lexington, KY	Richmond Division - Richmond, VA
Chicagoland Division - Merrillville, IN	Kentucky Division (Sat) - Paducah, KY	South Carolina Division - New Ellenton, SC
Chicagoland Division (SC) - Indianapolis, IN	Knoxville Division - Maryville, TN	South Jersey Division - Turnersville, NJ
Corona Division - Corona, CA	Massachusetts Division - Marlborough, MA	Southern Headquarters - Poquoson, VA
Erie Division - Erie, PA	Microbac Corporate Office - Wexford, PA	Southern Testing Division - Wilson, NC
Fayetteville Division - Fayetteville, NC	Microbac NY - Cortland Office - Cortland, NY	Southern Testing Division (Sat) - Greensboro, NC
Hauser Division - Boulder, CO	Microbac NY - Waverly Office - Waverly, NY	Venice Division - Venice, FL



## COOLER INSPECTION

Date: Friday, December 19, 2008

Client Name Alt & Witzig Engineering, Inc.

Date / Time Received: 12/12/2008

Work Order Number ME0812580

Received by: DEB

Checklist completed by DEB 12/12/2008 7:58:59 PM

Reviewed by DDG 12/16/2008 10:07:18 AM

Carrier name: Microbac

After-Hour Arrival?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included sufficient client identification?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included sufficient sample collector information?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included a sample description?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody identified the appropriate matrix?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included date of collection?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included time of collection?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody identified the appropriate number of containers?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
If samples are preserved, are the preservatives identified?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples properly preserved?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

If No, adjusted by?

Date/Time

Chain of custody included the requested analyses?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Container/Temp Blank temperatures

Cooler Temp

1 3 °C

VOA vials for aqueous samples have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

General Comments: The 5035 vials were received on 8/15/08.

Sample ID	Client Sample ID	Comments
ME0812580-01A	HA-1	Report in dry weight
ME0812580-02A	HA-2	Report in dry weight
ME0812580-03A	HA-3	Report in dry weight

Steve Shank  
08SB0183/COOPER DRIVE

12/19/2008  
DDG

Microbac

Samples Submitted to:

[ ] 250 West 84th Drive  
Merrillville, IN 46410  
Tel: 219-769-8378  
Fax: 219-769-1664

[ ] 5713 West 85th Street  
Indianapolis, IN 46278  
Tel: 317-872-1375  
Fax: 317-872-1379

Chain of Custody Record

Number 81476

Instructions on back

Client Name <u>Att: Witzig</u>	Project <u>08SB0183</u>	Turnaround Time	Report Type
Address <u>3725 Foundation Court</u>	Location <u>Cooper Drive</u>	<input checked="" type="checkbox"/> Routine (7 working days)	<input checked="" type="checkbox"/> Results Only <input type="checkbox"/> Level II
City, State, Zip <u>South Bend IN</u>	PO #	<input type="checkbox"/> RUSH* (notify lab)	<input type="checkbox"/> Level III <input type="checkbox"/> Level III CLP-like
Contact <u>J. M. Bennett</u>	Compliance Monitoring? <input type="checkbox"/> Yes(1) <input checked="" type="checkbox"/> No	(needed by)	<input type="checkbox"/> Level IV <input type="checkbox"/> Level IV CLP-like
Telephone # <u>574 289 8378</u>	(1) Agency/Program		<input type="checkbox"/> EDD
Sampled by (PRINT) <u>James R. Bennett</u>	Sampler Signature <u>[Signature]</u>	Sampler Phone # <u>574 289 8378</u>	
Send Report via <input type="checkbox"/> Mail <input type="checkbox"/> Telephone <input type="checkbox"/> Fax (fax #)	E-mail (address) <u>jimbennett@attwizig.com</u>		

\* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

\*\* Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

Client Sample ID	Matrix*	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analyses → Preservative Types ** ↓	VOC SHORT LIST	For Lab Use Only									
HA-1	S	X			12-11-08	0850	4	6, 7, U	X										0812580
HA-2	S	X			12-11-08	0905	4	6, 7, U	X										01A
HA-3	S	X			12-11-08	0930	4	6, 7, U	X										021
B-1 8'	GW	X			12-11-08	0840	3	3	X										03-
B-1 18'	GW	X			12-11-08	0915	3	3	X										
B-1 30'	GW	X			12-11-08	0940	3	3	X										
B-2 18'	GW	X			12-11-08	1015	3	3	X										
B-3 18'	GW	X			12-11-08														

Possible Hazard Identification <input type="checkbox"/> Hazardous <input type="checkbox"/> Non-Hazardous <input type="checkbox"/> Radioactive	Sample Disposition <input type="checkbox"/> Dispose as appropriate <input type="checkbox"/> Return <input type="checkbox"/> Archive																								
Comments	<table border="1"> <tr> <td>Relinquished By (signature)</td> <td>Date/Time</td> <td>Received By (signature)</td> <td>Date/Time</td> </tr> <tr> <td><u>[Signature]</u></td> <td>12-12-08 130</td> <td><u>[Signature]</u></td> <td>12/18/08 1310</td> </tr> <tr> <td>Relinquished By (signature)</td> <td>Date/Time</td> <td>Received By (signature)</td> <td>Date/Time</td> </tr> <tr> <td><u>[Signature]</u></td> <td>12/12/08 1750</td> <td></td> <td></td> </tr> <tr> <td>Relinquished By (signature)</td> <td>Date/Time</td> <td>Received for Lab By (signature)</td> <td>Date/Time</td> </tr> <tr> <td></td> <td></td> <td><u>[Signature]</u></td> <td>12/12/08 1750</td> </tr> </table>	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time	<u>[Signature]</u>	12-12-08 130	<u>[Signature]</u>	12/18/08 1310	Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time	<u>[Signature]</u>	12/12/08 1750			Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time			<u>[Signature]</u>	12/12/08 1750
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time																						
<u>[Signature]</u>	12-12-08 130	<u>[Signature]</u>	12/18/08 1310																						
Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time																						
<u>[Signature]</u>	12/12/08 1750																								
Relinquished By (signature)	Date/Time	Received for Lab By (signature)	Date/Time																						
		<u>[Signature]</u>	12/12/08 1750																						
Sample temperature upon receipt in degrees C = <u>30</u>																									



January 27, 2009

Jim Bennett  
Alt & Witzig Engineering, Inc.  
3725 Foundation Court, Suite A  
South Bend, IN 46628

Work Order No.: ME0812581

RE: 08SB0183/COOPER DRIVE

Dear Jim Bennett:

Microbac Laboratories, Inc. received 5 samples on 12/12/2008 5:50:00 PM for the analyses presented in the following report.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,  
Microbac Laboratories, Inc.

A handwritten signature in black ink, appearing to read "Deborah Griffiths", written over a horizontal line.

Deborah Griffiths  
Senior Project Manager

Enclosures

CC:  
Jim Barrett  
Steve Shank



## WORK ORDER SAMPLE SUMMARY

Date: Tuesday, January 27, 2009

CLIENT: Alt & Witzig Engineering, Inc.  
Project: 08SB0183/COOPER DRIVE  
Lab Order: ME0812581

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
ME0812581-01A	B-1 8'		12/11/2008 8:40:00 AM	12/12/2008
ME0812581-02A	B-1 18'		12/11/2008 9:15:00 AM	12/12/2008
ME0812581-03A	B-1 30'		12/11/2008 9:40:00 AM	12/12/2008
ME0812581-04A	B-2 18'		12/11/2008 10:15:00 AM	12/12/2008
ME0812581-05A	B-3 18'		12/11/2008	12/12/2008





## ANALYTICAL RESULTS

Date: Tuesday, January 27, 2009

Client: Alt & Witzig Engineering, Inc.  
Client Project: 08SB0183/COOPER DRIVE  
Client Sample ID: B-1 8'  
Sample Description:  
Sample Matrix: Aqueous

Work Order / ID: ME0812581-01  
Collection Date: 12/11/08 08:40  
Date Received: 12/12/08 17:50

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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### VOLATILE ORGANICS

Method: SW8260B

Prep Date/Time:

Analyst: MLT

1,1-Dichloroethane	A	ND	5.0		µg/L	1	12/17/08 22:05
1,1-Dichloroethene	A	ND	5.0		µg/L	1	12/17/08 22:05
cis-1,2-Dichloroethene	A	ND	5.0		µg/L	1	12/17/08 22:05
trans-1,2-Dichloroethene	A	ND	5.0		µg/L	1	12/17/08 22:05
Methylene chloride	A	ND	5.0		µg/L	1	12/17/08 22:05
Tetrachloroethene	A	ND	5.0		µg/L	1	12/17/08 22:05
1,1,1-Trichloroethane	A	ND	5.0		µg/L	1	12/17/08 22:05
Trichloroethene	A	ND	5.0		µg/L	1	12/17/08 22:05
Vinyl chloride	A	ND	2.0		µg/L	1	12/17/08 22:05
Surr: Toluene-d8	S	98.1	81.4-122		%REC	1	12/17/08 22:05
Surr: 4-Bromofluorobenzene	S	99.2	76.9-116		%REC	1	12/17/08 22:05
Surr: Dibromofluoromethane	S	103	78.4-125		%REC	1	12/17/08 22:05
Surr: 1,2-Dichloroethane-d4	S	111	74.2-136		%REC	1	12/17/08 22:05

# Microbac

## ANALYTICAL RESULTS

Date: Tuesday, January 27, 2009

Client: Alt & Witzig Engineering, Inc.  
 Client Project: 08SB0183/COOPER DRIVE  
 Client Sample ID: B-1 18'  
 Sample Description:  
 Sample Matrix: Aqueous

Work Order / ID: ME0812581-02  
 Collection Date: 12/11/08 09:15  
 Date Received: 12/12/08 17:50

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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### VOLATILE ORGANICS

Method: SW8260B

Prep Date/Time:

Analyst: MLT

1,1-Dichloroethane	A	ND	5.0		µg/L	1	12/17/08 22:35
1,1-Dichloroethene	A	ND	5.0		µg/L	1	12/17/08 22:35
cis-1,2-Dichloroethene	A	ND	5.0		µg/L	1	12/17/08 22:35
trans-1,2-Dichloroethene	A	ND	5.0		µg/L	1	12/17/08 22:35
Methylene chloride	A	ND	5.0		µg/L	1	12/17/08 22:35
Tetrachloroethene	A	ND	5.0		µg/L	1	12/17/08 22:35
1,1,1-Trichloroethane	A	ND	5.0		µg/L	1	12/17/08 22:35
Trichloroethene	A	ND	5.0		µg/L	1	12/17/08 22:35
Vinyl chloride	A	ND	2.0		µg/L	1	12/17/08 22:35
Surr: Toluene-d8	S	97.0	81.4-122		%REC	1	12/17/08 22:35
Surr: 4-Bromofluorobenzene	S	99.5	76.9-116		%REC	1	12/17/08 22:35
Surr: Dibromofluoromethane	S	104	78.4-125		%REC	1	12/17/08 22:35
Surr: 1,2-Dichloroethane-d4	S	118	74.2-136		%REC	1	12/17/08 22:35

# ANALYTICAL RESULTS

Date: Tuesday, January 27, 2009

Client: Alt & Witzig Engineering, Inc.  
 Client Project: 08SB0183/COOPER DRIVE  
 Client Sample ID: B-1 30'  
 Sample Description:  
 Sample Matrix: Aqueous

Work Order / ID: ME0812581-03  
 Collection Date: 12/11/08 09:40  
 Date Received: 12/12/08 17:50

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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## VOLATILE ORGANICS

Method: SW8260B

Prep Date/Time:

Analyst: MLT

1,1-Dichloroethane	A	ND	5.0		µg/L	1	12/17/08 23:05
1,1-Dichloroethene	A	ND	5.0		µg/L	1	12/17/08 23:05
cis-1,2-Dichloroethene	A	ND	5.0		µg/L	1	12/17/08 23:05
trans-1,2-Dichloroethene	A	ND	5.0		µg/L	1	12/17/08 23:05
Methylene chloride	A	ND	5.0		µg/L	1	12/17/08 23:05
Tetrachloroethene	A	ND	5.0		µg/L	1	12/17/08 23:05
1,1,1-Trichloroethane	A	ND	5.0		µg/L	1	12/17/08 23:05
Trichloroethene	A	ND	5.0		µg/L	1	12/17/08 23:05
Vinyl chloride	A	ND	2.0		µg/L	1	12/17/08 23:05
Surr: Toluene-d8	S	99.0	81.4-122		%REC	1	12/17/08 23:05
Surr: 4-Bromofluorobenzene	S	104	76.9-116		%REC	1	12/17/08 23:05
Surr: Dibromofluoromethane	S	106	78.4-125		%REC	1	12/17/08 23:05
Surr: 1,2-Dichloroethane-d4	S	123	74.2-136		%REC	1	12/17/08 23:05

# Microbac

## ANALYTICAL RESULTS

Date: Tuesday, January 27, 2009

Client: Alt & Witzig Engineering, Inc.  
 Client Project: 08SB0183/COOPER DRIVE  
 Client Sample ID: B-2 18'  
 Sample Description:  
 Sample Matrix: Aqueous

Work Order / ID: ME0812581-04  
 Collection Date: 12/11/08 10:15  
 Date Received: 12/12/08 17:50

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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### VOLATILE ORGANICS

Method: SW8260B

Prep Date/Time:

Analyst: MLT

1,1-Dichloroethane	A	ND	5.0		µg/L	1	12/18/08 12:17
1,1-Dichloroethene	A	ND	5.0		µg/L	1	12/18/08 12:17
cis-1,2-Dichloroethene	A	ND	5.0		µg/L	1	12/18/08 12:17
trans-1,2-Dichloroethene	A	ND	5.0		µg/L	1	12/18/08 12:17
Methylene chloride	A	ND	5.0		µg/L	1	12/18/08 12:17
Tetrachloroethene	A	ND	5.0		µg/L	1	12/18/08 12:17
1,1,1-Trichloroethane	A	ND	5.0		µg/L	1	12/18/08 12:17
Trichloroethene	A	ND	5.0		µg/L	1	12/18/08 12:17
Vinyl chloride	A	ND	2.0		µg/L	1	12/18/08 12:17
Surr: Toluene-d8	S	97.5	81.4-122		%REC	1	12/18/08 12:17
Surr: 4-Bromofluorobenzene	S	99.3	76.9-116		%REC	1	12/18/08 12:17
Surr: Dibromofluoromethane	S	100	78.4-125		%REC	1	12/18/08 12:17
Surr: 1,2-Dichloroethane-d4	S	105	74.2-136		%REC	1	12/18/08 12:17

# ANALYTICAL RESULTS

Date: Tuesday, January 27, 2009

Client: Alt & Witzig Engineering, Inc.  
 Client Project: 08SB0183/COOPER DRIVE  
 Client Sample ID: B-3 18'  
 Sample Description:  
 Sample Matrix: Aqueous

Work Order / ID: ME0812581-05  
 Collection Date: 12/11/08 00:00  
 Date Received: 12/12/08 17:50

Analyses	ST	Result	RL	Qual	Units	DF	Analyzed
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## VOLATILE ORGANICS

Method: SW8260B

Prep Date/Time:

Analyst: MLT

1,1-Dichloroethane	A	ND	5.0		µg/L	1	12/18/08 12:50
1,1-Dichloroethene	A	ND	5.0		µg/L	1	12/18/08 12:50
cis-1,2-Dichloroethene	A	ND	5.0		µg/L	1	12/18/08 12:50
trans-1,2-Dichloroethene	A	ND	5.0		µg/L	1	12/18/08 12:50
Methylene chloride	A	ND	5.0		µg/L	1	12/18/08 12:50
Tetrachloroethene	A	ND	5.0		µg/L	1	12/18/08 12:50
1,1,1-Trichloroethane	A	ND	5.0		µg/L	1	12/18/08 12:50
Trichloroethene	A	ND	5.0		µg/L	1	12/18/08 12:50
Vinyl chloride	A	ND	2.0		µg/L	1	12/18/08 12:50
Surr: Toluene-d8	S	97.0	81.4-122		%REC	1	12/18/08 12:50
Surr: 4-Bromofluorobenzene	S	97.2	76.9-116		%REC	1	12/18/08 12:50
Surr: Dibromofluoromethane	S	104	78.4-125		%REC	1	12/18/08 12:50
Surr: 1,2-Dichloroethane-d4	S	109	74.2-136		%REC	1	12/18/08 12:50

# Microbac®

## FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

NA	=	Not Analyzed	N/A	=	Not Applicable			
mg/L	=	Milligrams per Liter (ppm)	ug/L	=	Micrograms per Liter (ppb)	cfu	=	Colony Forming Unit
mg/Kg	=	Milligrams per Kilogram (ppm)	ug/Kg	=	Micrograms per Kilogram (ppb)	ng/L	=	Nanograms per Liter (ppt)
U	=	Undetected						
J	=	Analyte concentration detected between RL and MDL (Metals / Organics)						
B	=	Detected in the associated Method Blank at a concentration above the routine PQL/RL						
b	=	Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL						
D	=	Surrogate recoveries are not calculated due to sample dilution						
ND	=	Not Detected at the Reporting Limit (or the Method Detection Limit, if listed)						
E	=	Value above quantitation range						
H	=	Analyte was prepared and/or analyzed outside of the analytical method holding time						
I	=	Matrix Interference						
R	=	RPD outside accepted recovery limits						
S	=	Spike recovery outside recovery limits						
Surr	=	Surrogate						
DF	=	Dilution Factor	RL	=	Reporting Limit	ST	=	Sample Type
						MDL	=	Method Detection Limit

## SAMPLE TYPES

A	=	Analyte
I	=	Internal Standard
S	=	Surrogate
T	=	Tentatively Identified Compound (TIC, concentration estimated)

## QC SAMPLE IDENTIFICATIONS

MBLK	=	Method Blank	ICSA	=	Interference Check Standard "A"	OPR	=	Ongoing Precision and Recovery Standard
DUP	=	Method Duplicate	ICSAB	=	Interference Check Standard "AB"			
LCS	=	Laboratory Control Sample	LCSD	=	Laboratory Control Sample Duplicate			
MS	=	Matrix Spike	MSD	=	Matrix Spike Duplicate			
ICB	=	Initial Calibration Blank	CCB	=	Continuing Calibration Blank			
ICV	=	Initial Calibration Verification	CCV	=	Continuing Calibration Verification			
PDS	=	Post Digestion Spike	SD	=	Serial Dilution			

## CERTIFICATIONS

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #175458)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-02)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-08)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #0061)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

## MICROBAC LOCATIONS, SERVICE CENTERS (SC) AND SATELLITE OFFICES (Sat)

Baltimore Division - Baltimore, MD	Kentucky Division - Louisville, KY	New Castle Division - New Castle, PA
Camp Hill Division - Camp Hill, PA	Kentucky Division (Sat) - Evansville, IN	Pittsburgh Division - Warrendale, PA
Camp Hill Division (SC) - Pittston, PA	Kentucky Division (Sat) - Lexington, KY	Richmond Division - Richmond, VA
Chicagoland Division - Merrillville, IN	Kentucky Division (Sat) - Paducah, KY	South Carolina Division - New Ellenton, SC
Chicagoland Division (SC) - Indianapolis, IN	Knoxville Division - Maryville, TN	South Jersey Division - Turnersville, NJ
Corona Division - Corona, CA	Massachusetts Division - Marlborough, MA	Southern Headquarters - Poquoson, VA
Erie Division - Erie, PA	Microbac Corporate Office - Wexford, PA	Southern Testing Division - Wilson, NC
Fayetteville Division - Fayetteville, NC	Microbac NY - Cortland Office - Cortland, NY	Southern Testing Division (Sat) - Greensboro, NC
Hauser Division - Boulder, CO	Microbac NY - Waverly Office - Waverly, NY	Venice Division - Venice, FL

**Microbac**

## COOLER INSPECTION

Date: Tuesday, January 27, 2009

Client Name Alt & Witzig Engineering, Inc.

Date / Time Received: 12/12/2008 5:50:00 PM

Work Order Number ME0812581

Received by: DEB

Checklist completed by DEB 12/12/2008 8:09:03 PM

Reviewed by DDG 12/16/2008 10:11:18 AM

Carrier name: Microbac

After-Hour Arrival?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included sufficient client identification?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included sufficient sample collector information?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included a sample description?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody identified the appropriate matrix?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included date of collection?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody included time of collection?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody identified the appropriate number of containers?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
If samples are preserved, are the preservatives identified?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples properly preserved?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

If No, adjusted by?

Date/Time

Chain of custody included the requested analyses?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Samples received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Container/Temp Blank temperatures

Cooler Temp

1 3 °C

VOA vials for aqueous samples have zero headspace? No VOA vials submitted ☐ Yes ☒ No ☐

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

General Comments:

Sample ID	Client Sample ID	Comments
ME0812581-01A	B-1 8'	
ME0812581-02A	B-1 18'	
ME0812581-03A	B-1 30'	
ME0812581-04A	B-2 18'	
ME0812581-05A	B-3 18'	

# Microbac

**Samples Submitted to:** [ ] 250 West 84th Drive  
Merrillville, IN 46410  
Tel: 219-769-8378  
Fax: 219-769-1654

**[ ] 5713 West 85th Street  
Indianapolis, IN 46278  
Tel: 317-872-1375  
Fax: 317-872-1379**

### **Chain of Custody Record**

**Number** 81476

**Instructions on back**

Client Name <u>Alt?Witzig</u>		Project <u>085B0183</u>	Turnaround Time  <input checked="" type="checkbox"/> Routine (7 working days) <input type="checkbox"/> RUSH* (notify lab) _____ (needed by)	Report Type		
Address <u>3725 Foundation Court</u>		Location <u>Cooper Drive</u>		<input checked="" type="checkbox"/> Results Only	<input type="checkbox"/> Level II	
City, State, Zip <u>South Bend IN</u>		PO #		<input type="checkbox"/> Level III	<input type="checkbox"/> Level III CLP-like	
Contact <u>J.M. Bennett</u>		Compliance Monitoring? <input type="checkbox"/> Yes(1) <input checked="" type="checkbox"/> No		<input type="checkbox"/> Level IV	<input type="checkbox"/> Level IV CLP-like	
Telephone # <u>574 289 8378</u>		(1) Agency/Program	<input type="checkbox"/> EDD			
Sampled by (PRINT) <u>James R. Bennett</u>		Sampler Signature <u>[Signature]</u>	Sampler Phone # <u>574 289 8378</u>			
Send Report via <input type="checkbox"/> Mail <input type="checkbox"/> Telephone <input type="checkbox"/> Fax (fax #)		E-mail (address) <u>jimbennett@altwitzy.com</u>				

\* **Matrix Types:** Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

**\*\* Preservative Types:** (1) HNO<sub>3</sub>, (2) H<sub>2</sub>SO<sub>4</sub>, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

[illegible]

Possible Hazard Identification	<input type="checkbox"/> Hazardous	<input type="checkbox"/> Non-Hazardous	<input type="checkbox"/> Radioactive	Sample Disposition	<input type="checkbox"/> Dispose as appropriate	<input type="checkbox"/> Return	<input type="checkbox"/> Archive
Comments	Relinquished By (signature)		Date/Time	12-12-08 130	Received By (signature)		Date/Time 1510
	Relinquished By (signature)		Date/Time	1758	Received By (signature)		Date/Time
	Relinquished By (signature)		Date/Time	12/12/08	Received for Lab By (signature)		Date/Time 1752
Sample temperature upon receipt in degrees C = 30							





1701 North Ironwood Road  
South Bend Indiana 46635  
574-277-0707

TESTING TODAY, PROTECTING TOMORROW

WWW.SHERRYLABS.COM

Fax: 574-273-5699

CLIENT: Cripe's Septic Service, Inc.

Lab Order: E08110195

Project: Cooper Drive

Date Received: 11/24/2008

Date Reported: 15-Dec-08

Lab ID: E08110195-01 Collection Date: 11/24/2008

Sample ID: 3507 Cooper Drive Elkhart

Matrix: WASTEWATER

<u>Analyses</u>	<u>Result</u>	<u>Detection</u> <u>Limit</u>	<u>Qual</u>	<u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
PRIORITY POLLUTANT VOCs	E624					sub
1,2-Dichlorobenzene	< 20	20		ppb	12/8/2008 4:05:00	
1,3-Dichlorobenzene	< 20	20		ppb	12/8/2008 4:05:00	
1,4-Dichlorobenzene	< 20	20		ppb	12/8/2008 4:05:00	
1,1,1-Trichloroethane	< 20	20		ppb	12/8/2008 4:05:00	
1,1,2,2-Tetrachloroethane	< 20	20		ppb	12/8/2008 4:05:00	
1,1,2-Trichloroethane	< 20	20		ppb	12/8/2008 4:05:00	
1,1-Dichloroethane	< 20	20		ppb	12/8/2008 4:05:00	
1,1-Dichloroethene	< 20	20		ppb	12/8/2008 4:05:00	
1,2-Dichloroethane	< 20	20		ppb	12/8/2008 4:05:00	
1,2-Dichloropropane	< 20	20		ppb	12/8/2008 4:05:00	
2-Chloroethyl vinyl ether	< 40	40		ppb	12/8/2008 4:05:00	
Acrolein	< 200	200		ppb	12/8/2008 4:05:00	
Acrylonitrile	< 200	200		ppb	12/8/2008 4:05:00	
Benzene	< 20	20		ppb	12/8/2008 4:05:00	
Bromodichloromethane	< 20	20		ppb	12/8/2008 4:05:00	
Bromoform	< 20	20		ppb	12/8/2008 4:05:00	
Bromomethane	< 40	40		ppb	12/8/2008 4:05:00	
Carbon tetrachloride	< 20	20		ppb	12/8/2008 4:05:00	
Chlorobenzene	< 20	20		ppb	12/8/2008 4:05:00	
Chloroethane	< 40	40		ppb	12/8/2008 4:05:00	
Chloroform	< 20	20		ppb	12/8/2008 4:05:00	
Chloromethane	< 40	40		ppb	12/8/2008 4:05:00	
cis-1,3-Dichloropropene	< 20	20		ppb	12/8/2008 4:05:00	
Dibromochloromethane	< 20	20		ppb	12/8/2008 4:05:00	
Ethylbenzene	< 20	20		ppb	12/8/2008 4:05:00	
Methylene chloride	< 20	20		ppb	12/8/2008 4:05:00	
Tetrachloroethene	< 20	20		ppb	12/8/2008 4:05:00	
Toluene	< 20	20		ppb	12/8/2008 4:05:00	
trans-1,2-Dichloroethene	< 20	20		ppb	12/8/2008 4:05:00	
trans-1,3-Dichloropropene	< 20	20		ppb	12/8/2008 4:05:00	
Trichloroethene	< 20	20		ppb	12/8/2008 4:05:00	
Trichlorofluoromethane	< 20	20		ppb	12/8/2008 4:05:00	
Vinyl chloride	< 40	40		ppb	12/8/2008 4:05:00	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds MCL or Permit Limitation

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
MI+ - Matrix Interference  
H - Exceeds Holding Time

Lane Street Ground Water Contamination  
Elkhart, Elkhart County, IN  
EPA ID: INN000510229  
Potentiometric Surface Map  
Data Collection April 17, 2008

**potentiometric surface:** A hypothetical surface representing the level to which groundwater would rise if not trapped in a confined aquifer (an aquifer in which the water is under pressure because of an impermeable layer above it that keeps it from seeking its level). The potentiometric surface is equivalent to the water table in an unconfined aquifer.

**E2PY0**  
Potentiometric Surface 762.9' AMSL

762.80  
762.70  
762.60  
762.50  
762.40  
Direction of Ground Water Flow

**E2PX6**  
Potentiometric Surface 762.61' AMSL

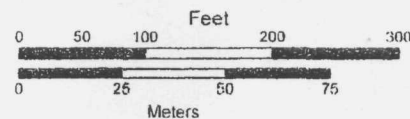
**E2PX3**  
Potentiometric Surface 762.27' AMSL

762.30

This map is part of a series of maps that are included in the Lane Street Ground Water Contamination Site Inspection (SI) Report. Refer to the SI Report when referencing this map.

**IDEM**

INDIANA DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT



**Legend**

- Ground Water Sample Locations
- Potentiometric Surface Contour

Map by: Mike Hill IDEMA Office of Land Quality, Science Services  
Branch Engineering & GIS Services, September 9, 2008

Potentiometric Surface is labeled in feet Above Mean Sea Level (AMSL)

- Sources:
- 2000 County Boundaries
  - Indiana Department of Transportation Road Layer
  - Indiana Department of Transportation State Boundary
  - 2005 Indiana Orthophotography
  - (Indiana Map Framework) Data
  - This map is referenced in the IDEM Lane Street Ground Water Contamination Site Inspection Report as Appendix 1

Disclaimer: This map graphically depicts locations and results of selected samples and is generated for the Lane Street Ground Water Contamination Site Inspection report.

4



## Documents

Kwilosz, Andrea to: Bernard Schorle  
cc: "Michael, Rodney"

06/01/2011 11:42 AM

1 attachment



Subsurface Investigation.pdf

Mr. Schorle:

Rod Michael asked that I forward to you a copy of the Subsurface Investigation for CQC, Inc. dated January 28, 2009. Mr. Michael is also forwarding to you the Phase I Environmental Site Assessment for Flexsteel dated July 3, 2002. The Phase I is too large to email to you so it is being sent to you via express mail and you should receive it tomorrow. Please let me know if you have any difficulty with this transmission.

## Taft /

**Andrea A. Kwilosz** / Legal Assistant  
Taft Stettinius & Hollister LLP  
One Indiana Square, Suite 3500  
Indianapolis, Indiana 46204-2023  
Tel: 317.713.3500 • Fax: 317.713.3699  
Direct: 317.713.3622  
[www.taftlaw.com](http://www.taftlaw.com) / [AKwilosz@taftlaw.com](mailto:AKwilosz@taftlaw.com)

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**Lane Street Ground Water Contamination Site --Testing at 3507 Cooper**

Bernard Schorle to: cgorman  
Sent by: BERNARD SCHORLE  
To: dpetroff

06/15/2011 04:20 PM

Attached is the report on the testing at 3507 Cooper that I got from Rod Michael. Nothing was found in the soil or groundwater samples. The work was done because of a concern over the Geocel contamination.



Subsurface Investigation-CQC AK60111.pdf